

Top cited papers

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1. Cosmological model of the universe

986 citations by astro-ph eprints in 2016

[Planck 2015 results. XIII. Cosmological parameters](#)

Planck Collaboration (P.A.R. Ade (Cardiff U.) *et al.*). Feb 5, 2015. 63 pp.

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[Efficient computation of CMB anisotropies in closed FRW models](#)

Antony Lewis, Anthony Challinor, Anthony Lasenby (Cambridge U.). Nov 1999. 4 pp.

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[Nine-Year Wilkinson Microwave Anisotropy Probe \(WMAP\) Observations: Cosmological Parameter Results](#)

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253 citations by astro-ph eprints in 2016

[Seven-Year Wilkinson Microwave Anisotropy Probe \(WMAP\) Observations: Cosmological Interpretation](#)

WMAP Collaboration (E. Komatsu (Texas U.) *et al.*). Jan 2010. 48 pp.

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224 citations by astro-ph eprints in 2016

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2. Universal dark matter halo

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[A Universal density profile from hierarchical clustering](#)

Julio F. Navarro (Arizona U., Astron. Dept. - Steward Observ.), Carlos S. Frenk (Durham U.), Simon D.M. White

([Garching, Max Planck Inst.](#)). Nov 1996. 16 pp.
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[Julio F. Navarro](#) ([Arizona U., Astron. Dept. - Steward Observ.](#)), [Carlos S. Frenk](#) ([Durham U.](#)), [Simon D.M. White](#) ([Garching, Max Planck Inst.](#)). Aug 1995. 22 pp.

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3. Discovery of gravitational waves

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[Observation of Gravitational Waves from a Binary Black Hole Merger](#)

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4. Simulating the Universe

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[The Cosmological simulation code GADGET-2](#)

[Volker Springel](#) ([Garching, Max Planck Inst.](#)). May 2005. 31 pp.

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[105](#) citations by astro-ph eprints in 2016

[Introducing the Illustris Project: Simulating the coevolution of dark and visible matter in the Universe](#)

[Mark Vogelsberger](#) ([MIT](#)), [Shy Genel](#) ([Harvard-Smithsonian Ctr. Astrophys.](#)), [Volker Springel](#) ([HITS](#)), [Paul Torrey](#) ([Harvard-Smithsonian Ctr. Astrophys.](#)), [Debora Sijacki](#) ([Cambridge U., Inst. of Astron.](#)), [Dandan Xu](#) ([HITS](#)), [Gregory F. Snyder](#) ([STScI](#)), [Dylan Nelson](#), [Lars Hernquist](#) ([Harvard-Smithsonian Ctr. Astrophys.](#)). May 12, 2014. 30 pp.

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5. Accelerating Universe

[323 citations by astro-ph eprints in 2016](#)

[Observational evidence from supernovae for an accelerating universe and a cosmological constant](#)

[Supernova Search Team](#) (Adam G. Riess (UC, Berkeley, Astron. Dept.) *et al.*). May 1998. 36 pp.

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[Supernova Cosmology Project](#) Collaboration (S. Perlmutter (UC, Berkeley, CfPA) *et al.*). Dec 1998. 33 pp.

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[Improved cosmological constraints from a joint analysis of the SDSS-II and SNLS supernova samples](#)

[SDSS](#) Collaboration (M. Betoule (Paris U., VI-VII) *et al.*). Jan 16, 2014. 32 pp.

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6. Theory of disks around black holes

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[Black holes in binary systems. Observational appearance](#)

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7. Gamma-ray sky

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[Fermi-LAT](#) Collaboration (E. Acero (DAPNIA, Saclay) *et al.*). Jan 8, 2015. 99 41 pp.

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[Peter M.W. Kalberla](#), [W.B. Burton](#), [Dap Hartmann](#), [E.M. Arnal](#), [E. Bajaja](#), [R. Morras](#), [W.G.L. Poppel](#) ([Bonn U.](#), [RAIUB](#) & [Leiden Observ.](#) & [NRAO, Charlottesville](#) & [Delft Tech. U.](#) & [Villa Elisa, Inst. Argentino Radioastron](#) & [La Plata U.](#)). Apr 2005. 9 pp.

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[The 6dF Galaxy Survey: Baryon Acoustic Oscillations and the Local Hubble Constant](#)

[Florian Beutler](#) ([Western Australia U.](#)), [Chris Blake](#) ([Swinburne U., Ctr. Astrophys. Supercomput.](#)), [Matthew Colless](#), [D.Heath Jones](#) ([Australian Astron. Observ.](#)), [Lister Staveley-Smith](#) ([Western Australia U.](#)), [Lachlan Campbell](#) ([Western Kentucky U.](#)), [Quentin Parker](#) ([Australian Astron. Observ. & Macquarie U.](#)), [Will Saunders](#), [Fred Watson](#) ([Australian Astron. Observ.](#)). Jun 2011. 18 pp.

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[William H. Press](#), [Paul Schechter](#) (Caltech), Aug 1973. 14 pp.

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[Paul Demorest](#) (NRAO, Charlottesville), [Tim Pennucci](#) (Virginia U., Astron. Dept.), [Scott Ransom](#) (NRAO, Charlottesville),

[Mallory Roberts](#) (Eureka Sci.), [Jason Hessels](#) (ASTRON, Dwingeloo & Amsterdam U., Astron. Inst.), Oct 2010.

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17. Unified model of active galactic nuclei (supermassive black holes)

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